

# CSG Sand Lab Dry Screened Test: (a) Grading

**Supplier :** Cardigan Sand & Gravel Co. Ltd.  
Cnwc-y-Saeson Production Plant  
Penparc, Cardigan, Ceredigion SA43 1RB

**Material Description :** 0/2 Lime Mortar Sand for Smooth Fine Normal (exceeding 10mm thick) Finishing Coats of Render using Natural Hydraulic Lime NHLB

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**Material Tested :** 0/2 Plastering and Rendering Mortar Sand FP Cat 1  
**Fines Content :** Category 1  
**BSI Published Document :** PD 6682-3 : 2003 T b1 B1  
**European Standard :** BS EN 13139 : 2013(E)

**Grid Ref.:** SN 200E 485N

**Material Source :** F1 CB1 1000M CSG

**Aggregate Type :** Glacial  
**Sampling Point :** Cnwc-y-Saeson  
**Age :** Pleistocene

**Sampled by :** DGK

The results of the sieve analysis are as shown on those of the following sieves which have the retained weight recorded against them

Sieve Size (mm)	Weight Retained (g)	% Retained	% Passing	St Astier Target Grading	BS. EN Tolerance 0/2
14.000		0.0	100.0	100.0	
10.000	0.0	0.0	100.0	100.0	
8.000		0.0	100.0	100.0	
6.300	0.0	0.0	100.0	100.0	
5.000		0.0	100.0	100.0	
4.000	0.0	0.0	100.0	100.0	100/100
3.350*		0.0	100.0	100.0	
2.800	0.2	0.1	99.9	100.0	98/100
2.000	2.7	0.9	99.0	98.0	± 5 89/99
1.180	8.4	2.8	96.2	94.0	
1.000	4.1	1.4	94.9	92.0	± 20 59/99
0.600	20.0	6.7	88.2	82.0	
0.500	18.0	6.0	82.2	75.0	FP 55/100
0.425					
0.300	99.8	33.3	48.9	48.0	
0.250	33.5	11.2	37.7	38.0	± 25 10/65
0.212	34.2	11.4			
0.150	53.0	17.7	8.6	18.0	
0.125	13.6	4.5	4.1	10.0	
0.075	11.6	3.9	0.2	0.0	
0.063	0.4	0.1	0.1	0.0	0/3
0.000	0.2	0.1	0.0	0.0	
Total	299.7	100.0			

## For your information

Cardigan Sand & Gravel Co. quarries a deposit that was laid down by an ancient lake fed by rivers flowing off the tip of the Teifi glacier. Our sands and aggregates are the result of disintegration of rock during transportation by the glacier. Our products, therefore, contain negligible amounts of shell and salt.

Our extracted materials pass through a rigorous system of scrubbers, screens, over-spill weirs, cyclones (prewash and dewatering) and classifiers. This allows us to carefully select particle sizes for optimum performance and also removes organic materials, clay, silt and mineral salts from the product.

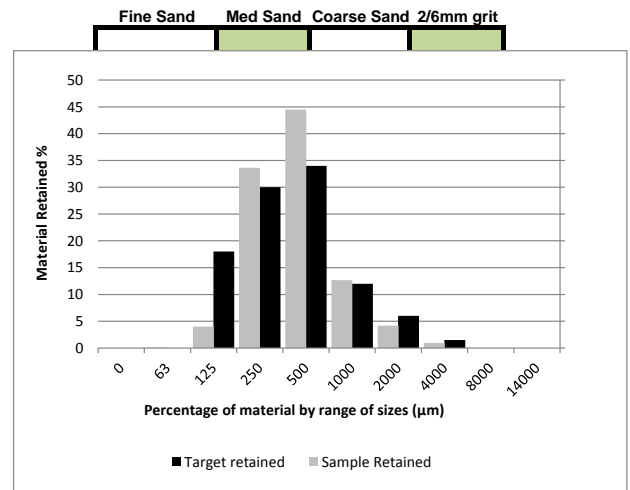
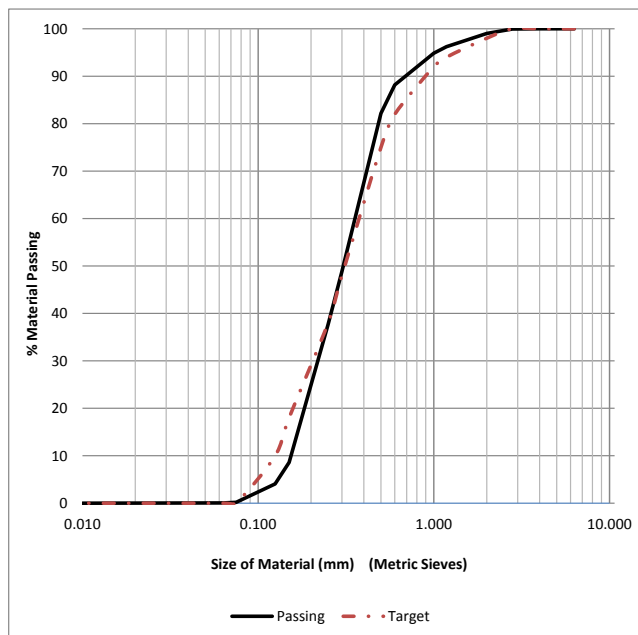
NHLB is the name we give to our Sand for Smooth Fine Normal Finishing Coats using Natural Hydraulic Lime.

2.36mm (or less) down to 0.075mm particles may be used and the proportion retained on 0.150, 0.125 and 0.075 sieves should not exceed 20% in total.

Adapted from St Astier Natural Hydraulic Lime "Practical Guide to choosing Sands". E. & O.E.

\* - Interpolated

Material microns	Clay	Silt			Sand		
		Fine	Medium	Coarse	Fine	Medium	Coarse
	0-2	2-6	6-20	20-60	60-200	200-600	600-2000



NOTE:- The % material larger than 0.063mm but smaller than 0.125mm is recorded between the 0.063 and 0.125 grid lines, etc.  
5 Grey Columns exceeding 10% = very well graded  
4 Grey Columns exceeding 10% = well graded  
3 Grey Columns exceeding 10% = less well graded  
2 Grey Columns exceeding 10% = poorly graded  
1 Grey Columns exceeding 10% = nearly monogranular

This information is a guide only and does not constitute a specification. There are a vast number of sands differing in grading and qualities. To be sure that a well graded sand is being used it is preferable that at least four grades form a substantial part of over 10% of the proposed sand. This sand has 3 grey columns in the size range above 10% indicating a less well graded sand. On site blending could improve this outcome - see Blending Programme ZBP4.NHLB 02 F1FF